

Amendments to the Claims

Claims 1-12 (Withdrawn)

12. (Currently Amended) A method for manipulating magnetizable particles having nucleic acid molecules bound directly thereto and being in a solution contained in at least one tube, said method comprising:

receiving said tube in a tube receiving opening of a tube receiver;

selectively moving a first magnet to a first location with respect to said tube to attract said magnetizable particles toward an inner wall of said tube, and to a second location with respect to said tube to allow said magnetizable particles to be suspended in said solution; and

applying a magnetic field to said magnetizable particles when said first magnet is positioned at said second location, to substantially remove a magnetization imposed on said magnetizable particles by said first magnet.

13. (Original) A method as claimed in claim 12, wherein:
said magnetic field comprises an AC magnetic field.

14. (Original) A method as claimed in claim 12, wherein:
said first magnet is coupled to a cam; and
said selectively moving step comprises the step of driving said cam to move said first magnet between said first and second locations.

15. (Original) A method as claimed in claim 12, wherein:
said tube receiver has a plurality of said tube openings for receiving a plurality of said tubes therein; and
said moving step comprises the step of moving a plurality of said first magnets between respective said first and second locations with respect to respective said tubes.

16. (Original) A method as claimed in claim 15, wherein:
said applying step applies a respective magnetic field to said magnetizable particles in each of said tubes when a respective one of said first magnets is positioned at a respective said second location to substantially remove a magnetization imposed on said magnetizable particles by said respective first magnet.

17. (Original) A method as claimed in claim 12, further comprising:
at least one of applying thermal energy to said solution in said tube and extracting thermal energy from said solution in said tube.

18. (Original) A method as claimed in claim 12, wherein:
said magnet moving step moves said magnet between said first and second locations in a first direction which is substantially parallel to a longitudinal axis of said tube.

19. (Original) A method as claimed in claim 12, wherein:
said applying step applies said magnetic field to said magnetizable particles from a side of said tube substantially opposite to a side adjacent to said first location.

20. (Original) A method as claimed in claim 12, wherein:
said magnet moving step maintains said magnet at said first location for a time sufficient for removal of said solution from said tube.